

CLAIMS

What is Claimed is:

1. A nanostructure sensing device comprising:
a substrate, said substrate being at a temperature of less than 100°C;
5 at least one nanostructure disposed over the substrate, said nanostructure
being at a temperature of at least 100°C; and
at least two conductive elements disposed over the substrate and
electrically connected to the at least one nanostructure.

2. The device of Claim 1, wherein the nanostructure comprises a nanotube.

10 3. The device of Claim 1, wherein the nanostructure comprises a plurality of
nanotubes.

4. The device of Claim 1, wherein the nanostructure is maintained at a
temperature of at least about 200°C.

15 5. The device of Claim 1, wherein the nanostructure is maintained at a
temperature of at least about 300°C.

6. The device of Claim 5, wherein the nanostructure is maintained at an
elevated temperature by passing a current of at least about 10 μ A through the
nanotube.